

AMENDMENTS TO THE CLAIMS**Claims 1-10 (cancelled)**

Claim 11 (new): A method for configuring a system having a plurality of processors to provide the system with at least one cluster of processors, each cluster having one service point, the method comprising the steps of:

computing a distance from each processor to other processors in the system;
computing a plurality of total distances, where each total distance is associated with one processor;

determining a minimum total distance from the plurality of total distances; and
assigning as the service point the processor having the minimum total distance associated therewith.

Claim 12 (new): A method according to claim 11, further comprising the step of partitioning the system into a plurality of clusters.

Claim 13 (new): A method according to claim 12, wherein said partitioning further comprises:

sorting the processors in accordance with the total distance associated with each processor;
assigning each processor to one of two clusters;
determining a minimum total distance for the processors in each cluster in accordance with the plurality of total distances associated with the processors in said cluster; and
assigning as the service point for each cluster the processor having the minimum total distance associated therewith in said cluster.

Claim 14 (new): A method according to claim 13, further comprising the steps of:
subdividing one of said two clusters into two subdivided clusters, thereby partitioning
the system into three clusters;

determining a minimum total distance for the processors in each of said three clusters in
accordance with the plurality of total distances associated with the processors in said three
clusters;

assigning the processors to said three clusters in accordance with the minimum total
distance; and

assigning as the service point for each of said three clusters the processor having the
minimum total distance associated therewith in said cluster.

Claim 15 (new): A method according to claim 11, wherein the processors are of different
types, and the processors are assigned to clusters in accordance therewith.

Claim 16 (new): A method according to claim 11, wherein said configuring is performed
dynamically when a processor is added to the system.

Claim 17 (new): A method according to claim 11, wherein said configuring is performed
dynamically when a processor is removed from the system.

Claim 18 (new): A method according to claim 17, wherein the partitioning of the system is
dynamically changed when a processor is removed from the system.

Claim 19 (new): A method according to claim 11, further comprising the step of assigning
another processor as a backup service point.

Claim 20 (new): A computer-readable storage medium having stored therein instructions for performing a method for configuring a system having a plurality of processors to provide the system with at least one cluster of processors, each cluster having one service point, the method comprising the steps of:

computing a distance from each processor to other processors in the system;
computing a plurality of total distances, where each total distance is associated with one processor;
determining a minimum total distance from the plurality of total distances; and
assigning as the service point the processor having the minimum total distance associated therewith.